

LEVIN, Semen Izrailevich; RASTOVA, G.V., ved. red.; STAROSTINA, L.D.,
tekhn. red.

[Prevention of breaks and the repair of underwater pipe-
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(MIRA 16:11)

(Underwater pipelines--Maintenance and repair)

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G.V., ved.red.; VORONOVA, V.V., tekhn.red.

[Setting up technical norms in the construction of main
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1963. 110 p. (MIRA 16:9)
(Pipelines--Production standards)

ALEKSANDROV, A.M., inzh.; BAZHENOV, V.S., inzh.; BOBROVNIKOV, B.N., inzh.; VAGANOV, M.P., inzh.; GUREVICH, B.M., inzh.; DZHIBELLI, V.S., inzh.; DROBAKH, V.T., inzh.; ISAKOVICH, R.Ya., kand. tekhn. nauk; KAPUSTIN, A.G., inzh.; KONENKOV, K.S., inzh.; MININ, A.A., kand. tekhn. nauk; PEVZNER, V.B., inzh.; PESKIN, G.L., inzh.; PORTER, L.G., inzh.; PRIYADILOV, A.N., inzh.; SLUTSKIY, L.B., inzh.; FEDOSOV, I.V., inzh.; FRENKEL', B.A., inzh.; TSIMBLER, Yu.A., inzh.; SHUL'GIN, V.Kh., inzh.; ESKIN, M.G., kand. tekhn. nauk; VOROB'YEV, D.T., inzh. [deceased]; SINEL'NIKOV, A.V., kand. tekhn. nauk; SHENDLER, Yu.I., kand. tekhn. nauk, red.; NESMELOV, S.V., inzh., zam. glav. red.; NOVIKOVA, M.M., ved. red.; RASTOVA, G.V., ved. red.; SOIGANIK, G.Ya., ved. red.; VORONOVA, V.V., tekhn. red.

[Automation and apparatus for controlling and regulating production processes in the petroleum and petroleum chemical industries] Avtomatizatsiia, pribory kontrolya i regulirovaniia proizvodstvennykh protsessov v neftianoi i neftekhimicheskoi promyshlennosti. Moskva, Gostoptekhzdat. Book 3. [Control and automation of the processes of well drilling, recovery, transportation, and storage of oil and gas] Kontrol' i avtomatizatsiia protsessov bureniia skvazhin, dobychi, transporta i khraneniia nefti i gaza. 1963. 551 p. (Automation) (MIRA 16:7)

(Petroleum production—Equipment and supplies)

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[Fundamentals of electrical engineering in the petroleum
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[Gas distributing stations and distribution regulator points of
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The change in the macrostructure and in the catalytic activity of aluminum oxide on treatment with water vapor and on being compressed. I. E. Nelmark, L. Kh. Freidlin, A. I. Kastrenenko, and N. V. Borunova. *Izvest. Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 1955, 784-9. The change in the macrostructure of Al_2O_3 brought about by heating in an autoclave for 5 hrs. at 350° and 100 atm. of steam pressure and by compression at 20,000 atm. was studied. The effect of the water vapor was to decrease the catalytic activity and to decrease its specific surface. The micropores almost disappeared and the vol. of the intermediate pores increased. The compression increased the apparent d. of the Al_2O_3 and destroyed the intermediate pores, thereby decreasing the specific catalytic activity at elevated temps.

I. Roytar Leach

mk

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MASLOV, M. M. "Development and Theoretical and Experimental Investigation of Schemes for Regulating the Excitation of Synchronous Generators." Acad Sci USSR, Power Institute imeni Academician G. M. Krzhizhanovskiy, Moscow, 1955 (Dissertations For Degree of Candidate of Technical Sciences)

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(KIDNEYS--TUMORS)

(MEDICAL INSTRUMENTS AND APPARATUS) (CYSTS)

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ACCESSION NR: AT5002787

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23

AUTHOR: Minkevich, A. N.; Tylkina, M. A. (Candidate of technical sciences);
Rastorguyev, L. N.; Rodionova, G. P.

B+/

TITLE: Thermochemical treatment of rhenum ✓

SOURCE: Vsesoyuznoye soveshchaniye po probleme reniya. 2d, Moscow, 1962. Reniy
(Rhenium); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1964, 221-225

TOPIC TAGS: rhenum, rhenum diffusion coating,⁶ rhenum coating, rhenum chromiz-
ing,⁶ rhenum boronizing,⁶ rhenum aluminizing, rhenum siliconizing, diffusion coat-
ing property, rhenum oxidation ✓

ABSTRACT: Certain properties and structures of diffusion layers formed by impregna-
tion of rhenum with chromium, boron, aluminum, and silicon have been investigated.
Aluminizing, chromizing, and siliconizing of rhenum were done by pack cementation
at 1000, 1100, and 1200C in a mixture of 40 parts chamotte powder, 60 parts of the
respective metal powder, and 3 parts ammonia chloride. Boronizing was done at 1000
and 1200C in a fused-salt bath consisting of 70% sodium tetraborate and 30% boron-
carbide powder, or by pack cementation at 1400C in boron-carbide powder in a vacuum

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furnace. Diffusion layers with clearly visible boundary lines were formed in all media tested. Boronized case was 0,06—0,14 mm thick and consisted of two layers, Re_7B_3 compound inside and ReB_3 compound outside. The highest hardness, $H_v = 1200 \text{ kg/mm}^2$, was obtained by pack cementation at 1400C. Siliconized case contained ReSi_2 and ReSi silicides. Its hardness was $927 = 1400 \text{ kg/mm}^2$. Chromizing yielded an α -phase case of rhenium solid solution in chromium. A diffusion layer containing Al_2Re_3 and Al_2Re compounds was formed by aluminizing. Oxidation-resistance tests carried out at 800C for 10 hr showed that chromized rhenium has the highest resistance (see Fig. 1 of the Enclosure). Orig. art. has: 3 figures and 2 tables. [ND]

ASSOCIATION: none

SUBMITTED: 05Aug64

ENCL: 01

SUB CODE: 1C, MM

NO REF SOV: 003

OTHER: 001

ATD PRESS: 3181

Card 2/3

BUL'ZHAKOV, K.A.; BUL'ONKOV, N.A.; YASTRUBOV, L.N.; TRIKLIN, M.S.

System $Mg_2Si - Mg_3Sb_2$. Sour. neorg. khim. 8 no.12:2705-2709 D '63.
(MIRA 1749)

RASTORGUYEV, Nikolay Profir'yevich; RYABIN'KIY, B.Ya., red.; AVRUTSKAYA, R.F.,
red.izd-va; VAYNSHTEYN, Ye.B., tekhn.red.

[Accounting and computation in iron and steel industry] Bukhgalter-
skiy uchet i k~~al~~'kuliatsiia v chernoi metallurgii. Izd. 2.,
izmenennoe i dop. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi
& tavotnoi metallurgii, 1958. 386 p. (MIRA 11:7)
(Iron industry--Accounting)
(Steel industry--Accounting)

RASTORGUEV, N. P.

RASTORGUEV, N. P. M. P. Bukhgalterskif uchot... 1949. (Card 2,
50-20749)

RASTORGUEV, N. P.

RASTORGUEV, N. P. Calculation in ferrous metallurgy. Moskva, Gos.
nauchno-tekhn. izd-vo lit-ry, po chernoi i tsvetnoi metallurgii, 1945.
(Mic 53-332)

Microfilm T-9

RASTORGUYEV, Nikolay Profir'yevich; RYABIN'KIY, B.Ya., red.; AVRUTSKAYA, R.F.,
red.izd-vs; VAYNSHTEYN, Ye.B., tekhn.red.

[Accounting and computation in iron and steel industry] Bukhgalter-
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i tsvetnoi metallurgii, 1958. 386 p. (MIRA 11:7)
(Iron industry--Accounting)
(Steel industry--Accounting)

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PASTORQUEV, G. P.

Iskuzhestvo v chernoy metallurgii. (Calculations in ferrous metallurgy.)
Moskva, Metallurgizdat, 1945.

254 p.

2. STORMS, W. F.

"Calculation of Ferrous Ionization," M. S. Thesis, 1945.

RASTORGUYEV, P.V.; RAZUMOVA, Ye.P.; PLYATER, V.N.

Results of controlling malaria and helminthiasis in water transportation in
1952. Med.paraz.i paraz.bol. no.4:309-313 J1-Ag '53. (MLRA 6:9)
(Malarial fever) (Worms, Intestinal and parasitic)

1ST AND 2ND ORDERS										PROCESSES AND PROPERTIES INDEX										3RD AND 4TH ORDERS									
<i>bc</i> Determination of organic substances in gas. H. N. Markovskiy (Soviet. Lab., 1957, 6, 887).—A modification of Dreher's method is described. R. T. <i>8-1-2</i>																													
68-11A METALLURGICAL LITERATURE CLASSIFICATION																													

RASTORGUYEV, V.I.

A cutting tool with wedge-type fastening. Stan.1 instr.26 no.11:
37 N '55. (MLRA 9:2)

(Cutting tools)

RASTORGUYEV, YU. L.

AID P - 2382

Subject : USSR/Engineering

Card 1/1 Pub, 28 - 3/7

Authors : Geller, Z. I. and Rastorguyev, Yu. L.

Title : Analysis of thermal operating conditions of an oil spray-burner in action

Periodical : Energ. byul. 7, 18-25, J1 1955

Abstract : The authors analyse the data obtained on TsKKB-type oil spray-burners in action, in the SPK-5 type steam boiler, in order to find causes of coking and failures. Several diagrams, graphs and a table are attached.

Institution: None

Submitted : No date

GELLER, Z.I., RASTORGUYEV, Yu.L.

Investigation of temperature in a mechanical nozzle for
atomizing fuel oil. Energ.biol. no.7 J1 '55. (MLRA 8:6)
(Nozzles) (Boilers)

GELLER, Z.I.; RASTORGUYEV, Yu.L.

Burning viscous fuel oil. Elek. biul. no. 6:10-14 Jo '55.
(Furnaces) (Petroleum as fuel) (MLA 8:6)

RASTORGUYEV, YU. L.

AID P - 2370

Subject : USSR/Engineering

Card 1/1 Pub. 28 - 4/13

Authors : Geller, Z. I. and Rastorguyev, Yu. L.

Title : Use of viscous petroleum-residue as fuel

Periodical : Energ. Byul., 6, 10-14 **Je 1955**

Abstract : The residue after first distillation of petroleum (mazut) until recently was freely used for fuel purposes. It was then found valuable for further distillation, and accordingly its wide use as a fuel has been restricted. The mazut which is now used as boiler fuel is a compound of petroleum residues with certain distillates. The fact that the compound must meet the requirements of GOST 1501-42 is criticized. The authors also describe results of their observation of the use of a new fuel compound, and give two drawings and 2 graphs in illustration of their findings.

Institution: None

Submitted : No date

GELLER, Z.I., RASTORGYEV, Yu.L.

Investigation of temperature in a mechanical nozzle for
atomizing fuel oil. Energ.biol. no.7 J1 '55. (MLRA 8:6)
(Nozzles) (Boilers)

GELLER, Z.I.; RASTORGUYEV, Yu.L.

Burning viscous fuel oil. Elek. biul. no. 6:10-14 J. '55.
(Furnaces) (Petroleum as fuel) (MLA 8:6)

WISCONSIN, W.L.

AID P - 2370

Subject : USSR/Engineering

Card 1/1 Pub. 28 - 4/13

Authors : Geller, Z. I. and Rastorguyev, Yu. L.

Title : Use of viscous petroleum-residue as fuel

Periodical : Energ. Byul., 6, 10-14 **Je 1955**

Abstract : The residue after first distillation of petroleum (mazut) until recently was freely used for fuel purposes. It was then found valuable for further distillation, and accordingly its wide use as a fuel has been restricted. The mazut which is now used as boiler fuel is a compound of petroleum residues with certain distillates. The fact that the compound must meet the requirements of GOST 1501-42 is criticized. The authors also describe results of their observation of the use of a new fuel compound, and give two drawings and 2 graphs in illustration of their findings.

Institution: None

Submitted : No date

RASTORGUYEVA, A.V.

Separating properties of electric fields in a system of annular electrodes. Izv. vys. ucheb. zav.; fiz. no.4:178-182 '60.

(MIRA 13:9)

1. Moskovskiy pedinstitut im. V.P. Potemkina.

(Electric fields)

(Electrodes)

S/139/60/000/004/022/033
E032/E514

AUTHOR: Rastorguyeva, A.V.

TITLE: Separating Properties of the Electric Field Due to a System of Ring Electrodes 1

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, 1960, No.4, pp.178-182

TEXT: Dielectric separation is defined as the separation of nonuniform solid bodies owing to differences in pondermotive forces due to an electric field acting on the bodies. These forces depend on the field gradient and the dipole moments induced in the particles. The present authors have developed an instrument for the dielectric separation of materials. Basically the instrument consists of a system of thin ring electrodes. The instrument is shown schematically in Fig.2. A and B are two perspex plates carrying four systems of concentric ring electrodes. The potential of these electrodes could be varied between 0 and 10 kV. It was found that chalcopyrite, limonite and hematite could be separated from quartz and fluorite (all in powder form) with the aid of the above instrument. The instrument can also be used to separate

Card 1/2

S/139/60/000/004/022/033
E032/E514

Separating Properties of the Electric Field Due to a System of
Ring Electrodes

dielectrics having not very different dielectric constants, for example, calcite ($\epsilon = 8$) and fluorite ($\epsilon = 6.8$). A detailed calculation is given of the electric field due to the configuration of ring electrodes used in the instrument. There are 2 figures, 1 table and 9 references: 8 Soviet and 1 English.

ASSOCIATION: Moskovskiy pedinstitut imeni V. P. Potemkina
(Moscow Institute of Education imeni V.P.Potemkin)

SUBMITTED: July 23, 1959

Card 2/2

RASTORGUYEVA, L. I.

✓ Hydrolysis of alginic acid and derivatives of d-mannuronic acid. S. N. Danilov and L. I. Rastorgueva (Inst. High Molecular Compd., Acad. Sci. U.S.S.R., Moscow). *Zhur. Obshch. Khim.* 25, 1660-1661 (1953); cf. R., Thesis, Leningrad, 1954. — In the prepn. of alginic acid it is desirable to treat the macerated Na alginate with aq. HCl (0.5%) for sepn. from ash elements; after this treatment the product is extd. with MeOH. For hydrolysis of alginic acid it is best to use refluxing 90% HCO₂H in several stages, which yield completely pure d-mannuronic lactone, (I). The latter is difficult to isolate from hydrolyzates using alc. HCl. Ba mannuronate, (C₆H₇O₅)₂Ba, decomp. about 180°. [α]_D²⁰ 3.51°, with PhNHNH₂ forms phenylhydrazone, decomp. above 200°. Pure I, m. 143-4°, [α]_D²⁰ 92.84°. I treated with MeOH soln. of NH₃ gave 1-aminomannuronamide, decomp. 145°, [α]_D²⁰ -10.86° (after 10 min.) and shows mutarotation in aq. soln. I in alc. PhNHNH₂ yields the phenylhydrazone of d-mannuronic acid phenylhydrazone, decomp. 186°, [α]_D²⁰ 14.68° (pyridine). I with Ac₂O-ZnCl₂ gave triacetyl-I, m. 119-20°, [α]_D²⁰ 139.84° (dry CHCl₃). I with alc. EtSH gave I diethylmercaptal, a sirup, which forms a triacetate, m. 103-4°, [α]_D²⁰ 36.72° (MeOH). I in concd. HCl treated with PhCH₂SH gave 80% I dibenzylmercaptal, m. 44-5°, [α]_D²⁰ 125° (MeOH). The soln. of I in N HCl in MeOH treated with excess PhCH₂SH and kept 1.5 hrs. yields, apparently, the Me ester of mannuronic acid benzylmercaptal, a sirup; this with Ac₂O gave Me 2,3,4,5-tetraacetyldibenzylmercaptal-d-mannuronate, m. 95-6° (crude), m. 96-7° (from MeOH), [α]_D²⁰ 164.94° (in CHCl₃). I dibenzylmercaptal treated with Ac₂O in pyridine gave 57% product, C₂₄H₂₈O₁₁S₂, m. 147-9°, [α]_D²⁰ 99.93°, whose acetate does not form a phenylhydrazone nor does it form Me esters on heating in MeOH. G. M. Kosolapov

DANILOV, S.N.; RASTOROUYEVA, L.I.

Hydrelsis of alginic acid and α -mannurenic acid derivatives.
Zhur.ob.khim. 25 no.8:1590-1601 Ag '55. (MLRA 9:2)

1. Institut vysekomelekulyarnykh soedineniy Akademii nauk SSSR.
(Alginic acid) (Mannurenic acid)

PEREPECHENKO, P.; SOKOLOV, G.; AVDOSHENKO, A., red.; PEREPECHENKO, P., red.; POLETAYEV, A., red.; RASTORGUYEVA, N., red.; SOKOLOV, G., red.; KHAYKIN, I., red.; KHOKHOLKOV, N., red.; SHVETSOVA, R.V., red.; SOKOLOVA, S.I., tekhn. red.

[Excursions through native territory; routes and discussion materials] Ekskursii po rodnomu kraiu; marshruty i materialy dlia besed. Vologda, Vologodskoe knizhnoe izd-vo, 1963. 255 p. (MIRA 17:1)

1. Vologda. Gosudarstvenny. pedagogicheskii institut.

RASTORGUYEVA-ARKHANGEL'SKAYA, M.S.

Effectiveness of clinical treatment with Sokolovaya mineral water
in chronic cholecystitis and hepatocholecystitis. Vop.kur.fizioter.
i loch.fiz.kul't. 23 no.2:104-109 Mr-Apr '58. (MIRA 11:6)

1. Iz kafedry propedevtiki vnutrennikh bolezney (zav. - prof. I.I.
TSvetkov [deceased]) Saratovskogo meditsinskogo instituta.
(SARATOV--MINERAL WATERS, SULFUROUS)
(GALL BLADDER--DISEASES)

RASTORPOVA, S.F.; MENIKER, V.D.

Rubber and fillers in the tire industry of the U.S.A. (from "Kaučuk
a plastické hmoty," no.5, 1960). Kauch.i rez. 20 no.3:55-56 Mr '61.
(MIRA 14:3)

(United States--Rubber industry)

NAZAROV, TS.A.; LUSTOV, T.P.; RASTOSKUYEV, B.A.

Winter operation of a series of hydroelectric power stations on
a mountain river. Izv. AN Kazakh SSR. Ser. energ. no. 6: 114-116 '54.
(Hydroelectric power stations) (MLRA 9:4)

STOTSKIY, Lev Rudol'fovich; RASTOVA, G.V., ved. red.; SVYATITSKAYA, K.P.,
ved. red.; FEDOTOVA, I.G., tekhn.red.

[Fireman for boilers using liquid or gas fuel] Kochegar kotel'nykh
na zhidkom i gazoobraznom toplive. Moskva, Gos.nauchno-tekhn.izd-vo
neft.i gorno-toplivnoi lit-ry, 1960. 325 p. (MIRA 14:12)
(Boilers—Firing)

RASTOVA, G.V., ved. red.; BASHMAKOV, G.M., tekhn. red.

[Manual of basic instructions on the use of liquefied hydro-carbon gases; planning and construction of gas-distributing systems, transportation, storage, and uses] Sbornik rukovodiaschchikh ukazanii po ispol'zovaniu szhizhennykh uglevodorodnykh gazov; proektirovanie i stroitel'stvo gazoraspredelitel'nykh ustroystv, perevozka, khranenie i ispol'zovanie. Moskva, Gostoptekhizdat, 1962. 228 p. (MIRA 15:7)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye gazovoy promyshlennosti.

(Liquefied petroleum gas)

KHARAS, Zakhariy Borisovich; PEREVERZEV, V.V., red.; RASTOVA, G.V.,
vedushchiy red.; VORONOVA, V.V., tekhn. red.

[Rigging operations in installing equipment at petroleum
refineries] Takelazhnye raboty pri montazhe oborudovaniia
neftopererabatyvaiushchikh zavodov. Moskva, Gos.nauchno-
tekhn.izd-vo neft.i gorno-toplivnoi lit-ry, 1961. 258 p.
(MIRA 15:1)

(Petroleum refineries--Equipment and supplies)

SHREYBER, Gennadiy Konstantinovich, dots., kand.tekhn.nauk;
SHIBRYAYEV, Boris Filippovich, dots. kand. tekhn. nauk;
POLFEROV, Aleksandr Pavlovich, dots.; PERLIN, Samuil
Mendeleyevich, inzh.; RASTOVA, G.V., ved. red.; VORONOVA,
V.V., tekhn. red.

[Building materials in the petroleum, petrochemical, and gas
industries] Konstruktsionnye materialy v neftianoj, nefte-
khimicheskoi i gazovoi promyshlennosti; spravochnoe rukovod-
stvo. [By] G.K. Shreyber i dr. Moskva, Gostoptekhizdat, 1962.
381 p. (MIRA 16:3)

(Building materials) (Chemicals industry)
(Petroleum industry)

PEIROV, Igor' Petrovich; SHKIDLOV, Viktor Vasil'yevich;
PEREVERZEV, V.V., red.; RASIOVA, G.V., ved. red.

[Overground laying of pipelines] Nadzemnaya prokladka truboprovodov. Moskva, Nedra, 1965. 246 p. (NIRA 18:3)

ZHILINSKIY, Petr Pavlovich; RASTOVA, G.V., vedushchiy red.; FEDOTOVA, I.G.,
tekhn. red.

[Pipe-laying machinery; operation and repair] Truboukladchiki; eksplua-
tatsiia i remont. Moskva, Gos. nauchno-tekhn. izd-vo نفت. i gorno-
toplivnoi lit-ry, 1961. 129 p. (MIRA 14:7)
(Pipelines--Equipment and supplies)

IVANTSOV, Oleg Maksimovich; SHAKHMAJEVA, Ye.A., vedushchiy red.; RASTOVA,
G.V., vedushchiy red.; MUKHINA, E.A., tekhn.red.

[Industrialization of pipeline construction] Industrializatsiya
stroitel'stva magistral'nykh truboprovodov. Moskva, Gos.nauchno-
tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, 1960. 116 p.

(MIRA 13:5)

(Pipelines)

DAVIDOVICH, Petr Yakovlevich; ZINOVKINA, Miloslava Mikhaylovna; KRIKUN, Viktor Yakovlevich; LUCHSHEV, Anatoliy Mikhaylovich; PEREVERZEV, V.V., red.; RASTOVA, G.G., vedushchiy red.; MUKHINA, E.A., tekhn. red.

[Rotary trench excavators for laying pipes; manual for excavator operators] Transheinye rotornyye ekskavatory dlia truboprovodnogo stroitel'stva; v pomoshch' mashinistu ekskavatora. Moskva, Gos. nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, 1961.
223 p. (MIRA 14:10)

(Excavating machinery)

KHRAPACH, Grigoriy Kuz'mich; MALYUKOV, G.A., red.; RASTOVA, G.V.,
ved. red.

[Installation and repair of compressors] Montazh i remont
kompessorov. Moskva, Izd-vo "Nedra," 1964. 479 p.
(MIRA 17:5)

KHOL'TSBEKHER, Kristian [Holzbecher, Kristian], inzh.; FORER,
I.B., red.; RASTOVA, G.V., ved. red.; VORONOVA, V.V.,
tekhn. red.

[Economical methods for burning gas in industry] Ekono-
michnye metody szhiganiia gaza v promyshlennosti. Mo-
skva, Gostoptekhizdat, 1964. 110 p. ~~Translated~~ from the
Czech. (MIRA 17:4)

FAL'KEVICH, Aleksandr Semenovich; RASTOVA, G.V., ved. red.; POLOSINA,
A.S., tekhn. red.

[Welding pipelines and plant (industrial) piping] Svarka ma-
gistrul'nykh i zavodskikh (tekhnologicheskikh) truboprovodov.
2. izd. Moskva, Gostoptekhizdat, 1962. 422 p. (MIRA 15:10)
(Pipe--Welding)

SOKOLOVSKIY, Solomon Moiseyevich; RASTOVA, G.V., vedushchiy red.;
FEDOTOVA, I.G., tekhn.red.

[Angle compressors] Uglovye kompressory. Moskva, Gos.nauchno-
tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, 1960. 89 p.
(MIRA 13:6)

(Air compressors)

SIDORENKO, M.V., red.; VOLONIKHIN, Yu.V., red.; GORECHENKOV, G.I., red.;
IVANTSOV, O.M., red.; MAL'KOV, I.A., red.; TESNER, P.A., red.;
YENISHERLOVA, O.M., vedushchiy red.; RASTOVA, G.V., vedushchiy
red.; SOLGANIK, G.Ya., vedushchiy red.; MUKHINA, E.A., tekhn.red.

[Techniques of the gas industry abroad; papers and reports
presented at the 7th International Gas Congress] Tekhnika zaru-
beznoi gazovoi promyshlennosti; doklady i referaty. Moskva,
Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, 1960.
367 p. (MIRA 13:11)

1. International Gas Congress. 7th, Roma.
(Gas industry)

GUSMAN, Moisey Timofeyevich; KOL'CHENKO, Aleksandr Vasil'yevich; SILIN, Askol'd Aleksandrovich; RASTOVA, G.V., vedushchiy red.; FEDOTOVA, I.G., tekhn.red.

[Rubber-metal turbodrill bearings] Rezino-metallicheskie podshipniki turboburov. Moskva, Gos.nauchno-tekhn.izd-vo nef. i gorno-toplivnoi lit-ry, 1959. 105 p. (MIRA 13:3)
(Bearings (Machinery)) (Turbodrills)

YABLINSKIY, Vsevolod Sergeyevich; YUFIN, Vsevolod Aleksandrovich;
BUDAROV, Ivan Prokof'yevich; RASTOVA, G.V., vedushchiy red.;
MUKHINA, E.A., tekhn.red.

[Consecutive pipelining of petroleum products and petroleum]
Posledovatel'naya perekachka nefteproduktov i neftei po magi-
stral'nykh truboprovodam. Moskva, Gos.nauchno-tekhn.isd-vo
neft. i gorno-toplivnoi lit-ry, 1959. 148 p. (MIRA 13:2)
(Pipelines)

AL'TSHUL', Adol'd Davydovich; RABINOVICH, Ye.Z., kand. tekhn. nauk,
red.; RASTOVA, G.V., ved. red.; BASIMAKOV, G.M., tekhn. red.

[Local hydraulic resistances in the flow of viscous fluids]
Mestnye gidravlicheskie soprotivleniia pri dvizhenii viazkikh
zhidkosti. Moskva, Gostoptekhizdat, 1962. 114 p.

(MIRA 15:6)

(Fluid mechanics)

TOROCHKOV, Iven Mikhaylovich; SINEL'NIKOV, Aleksandr Vasil'yevich;
MATSKIN, Leonid Arkad'yevich; SLUTSKIY, Lev Borisovich;
GIL'BERT, Stepan Fomich; ALEKSANDROV, Adol'f Moritsovich;
RASTOVA, G.V., vedushchiy red.; FEDOTOVA, I.G., tekhn.red.

[Automatic filling of petroleum products tank trucks] Avto-
maticheskii nalive nefteproduktov v avtomobil'nye tsisterny.
Moskva, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry.
1960. 83 p. (MIRA 14:3)

(Tank trucks)

BORODIN, Ivan Vasil'yevich; RASPOVA, G.V., vedushchiy red.; MUKHINA,
E.A., tekhn.red.

[Construction and assembly work in gas supply and distribution]
Stroitel'no-montazhnye raboty po gazosnabzheniyu. Moskva, Gos.
mashino-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, 1960. 304 p.
(MIRA 14:3)

(Gas distribution)

RASTOVAC, Milutin
SURNAME (in caps); Given Names

Country: Yugoslavia

Academic Degrees: /not given/

Affiliation: Belgrade

Source: Belgrade, Narodno zdravlje, No 7-8, 1961, pp 246-248.

Data: "Composition and Election of Members in Councils of Public Health
of the Municipal People's Committees."

- Belgrade, MEDICINA, Vol. 17, No. 11, 1981.
1. "Methodology of Planning Preventive Health Services for the Population with Special Attention to the Problems of the Elderly at the Commune Level" (Istok D. Djurica, Zvezdica (Sarajevo)) pp 153-156.
 2. "Methodology of Studying Food Consumption in Yugoslavia During Medical Studies of Adequacy of Nutritional Status of the Population" (Doklad Dr B. J. Jelic, Medicinski Institut za Health Protection, Belgrade) pp 166-172.
 3. "Professional Training of Assistants to Directors of Medical Institutions" (Miroslav J. Jelic, Belgrade) pp 172-174.

1. General used as screening matter.

ca

Determination of unchanged hydrocarbon in commercial nitrobenzene and its derivatives. K. Rastovtzeva Zvezdskaya Lab. 5, 00110000. Introduce into a 200-cc. Wurtz flask 100 cc. of PhNO_2 , 5 g. P_2O_5 and a few sealed capillary tubes, boil gently for 20 min. and collect the distd. hydrocarbon in a graduated cylinder. C. H.

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ASD 35 0 METALLURGICAL LITERATURE CLASSIFICATION

RASTRENIENKO, A.I.; PLACHINDA, A.S.; HEYMARK, I.Ye.; Prinipalni uchastkiye:
ANTONOVSKAYA, S.N.; IL'IN, V.G.

Adsorption of hydrocarbons on ion-exchange derivatives of A type
zeolite. Ukr.khim.zhur. 30 no.11:1143-1145 '64.

(MIRA 18:2)

1. Institut fizicheskoy khimii Im. L.V.Pisarzhevskogo AN UkrSSR.

RASTRENKO, A.I.

Sorptive capacities of cation substituted bentonites. Bent.
gliny Ukr. no.3:35-44 '59. (MIRA 12:12)

1. Institut obshchey i neorganicheskoy khimii AN USSE.
(Bentonite)

RASTREHENKO, A.I.; BYKOV, S.F.

Studying hydrophilic and sorptive properties of Cherkassy bentonites.
Bent. gliny Ukr. no.2:94-101 '58. (MIRA 12:12)

1. Institut obshchey i neorganicheskoy khimii AN USSR.
(Cherkassy Province--Bentonite)

L 20756-02 EPF(c)/EWP(j)/EWT(m)/T Pc-4/Pr-4/Pb-4 RM
ACCESSION NR: AP5000474 S/0073/64/030/011/1143/1145

AUTHOR: Rastrenenko, A. I.; Plachinda, A. S.; Neymark, I. Ye. B

TITLE: The adsorption of hydrocarbons on ion exchange derivatives of type A zeolite

SOURCE: Ukrainskiy khimicheskii zhurnal, v. 30, no. 11, 1964, 1143-1145

TOPIC TAGS: type A zeolite, hydrocarbon adsorption, molecular sieve, propane separation, paraffinic hydrocarbon

ABSTRACT: The adsorption isotherms of saturated normal hydrocarbons on type A zeolites containing Na and Ca, Na and Co and Na and Ni cations in different ratios was studied. When the $[Ca^{++}]/([Ca^{++}] + [Na^{+}])$ ratio was ≈ 0.3 , a sharp increase was noted in the adsorption of propane on the CaNaA zeolite at all pressures over 0.5 mm. The $p = 0.5$ mm isobar did not show this increase. The behavior in NaMgA zeolites was similar. Substitution of about 30% of the Na by the divalent Ni and Co also caused a rapid change in the molecular sieve properties of type A zeolite. As the hydrocarbon chain length increased from

Cord1/2

L 20756-65
ACCESSION NR: AP5000474

3

C₃-C₁₀ the adsorption of the n-paraffins decreased from ~2.2 to 1.1 mmol/gm. Propane (~5Å) was readily adsorbed, while the C₅ and longer hydrocarbon chains require distortion for diffusion into the zeolite, and greater exchange of Na for Ca, hence propane can be readily separated from a hydrocarbon mixture using a zeolite with the proper amount of substitution of Na by Ca. "S. N. Antonovskaya and V. G. Il'in participated in the experimental part of the work, for which the authors express thanks." Orig. art. has: 3 figures

ASSOCIATION: Institut fizicheskoy khimii im. L. V. Pisarzhevskogo AN Ukr SSR
(Institute of Physical Chemistry AN Ukr SSR)

SUBMITTED: 20Sep63

ENCL: 00

SUB CODE: IC, GC

NO REF SOV: 001

OTHER: 002

Card 2/2

IL'IN, V.G.; ANTINOVSKAYA, S.N.; RADIRENKO, A.P.; NEYMARE, I.Ye.

Some features of the crystallization and properties of high-silica faujasites. Dokl. AN SSSR 166 no.3:604-606. Ja 1966.

(MIRA 19:1)

1. Institut fizicheskoy khimii im. I.V.Priazhevskogo AN UkrSSR.
Submitted May 25, 1965.

RASTRENOVA, A.I.

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PHASE I BOOK EXPLOITATION

SOV/6246

Soveshchaniye po tseolitam. 1st, Leningrad, 1961.

Sinteticheskiye tseolity; polucheniye, issledovaniye i primeneniye
(Synthetic Zeolites: Production, Investigation, and Use). Mos-
cow, Izd-vo AN SSSR, 1962. 286 p. (Series: Its: Doklady)
Errata slip inserted. 2500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh
nauk. Komisiya po tseolitam.

Resp. Eds.: M. M. Dubinin, Academician and V. V. Serpinskiy, Doctor
of Chemical Sciences; Ed.: Ye. G. Zhukovskaya; Tech. Ed.: S. P.
Golub'.

PURPOSE: This book is intended for scientists and engineers engaged
in the production of synthetic zeolites (molecular sieves), and
for chemists in general.

Card 1/10

Synthetic Zeolites: (Cont.)

SOV/6246

COVERAGE: The book is a collection of reports presented at the First Conference on Zeolites, held in Leningrad 16 through 19 March 1961 at the Leningrad Technological Institute imeni Lensevet, and is purportedly the first monograph on this subject. The reports are grouped into 3 subject areas: 1) theoretical problems of adsorption on various types of zeolites and methods for their investigation, 2) the production of zeolites, and 3) application of zeolites. No personalities are mentioned. References follow individual articles.

TABLE OF CONTENTS:

Foreword

Dubin, N. M. Introduction

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Carl 2/28

Synthetic Zeolites: (Cont.)

SOV/6246

Tsitishvili, G. V., and G. D. Bagratishvili. IR Spectra of Water and Heavy Water Adsorbed on Zeolites

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Shirinskaya, L. P., and N. F. Yermolenko. Applicability of the General Laws of Ion Exchange to Exchange on Synthetic Zeolite CaA

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Neymark, I. Ye., A. I. Rastrenenko, V. P. Fedorovskaya, and A. S. Plachinda. Variation of Adsorption Properties of Zeolites as a Function of the Degree of Sodium-Ion Substitution by Other Cations

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Neymark, I. Ye., M. A. Piontkovskaya, A. Ye. Lukash, and R. S. Tyutyunnik. Variation of the Selective Capacity of Synthetic Zeolites

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RASTRENEKO, A. I.

15(2)

PHASE I BOOK EXPLOITATION

SOV/1940

Ovcharenko, Fedor Danilovich, Nikolay Grigor'yevich Kirichenko,
Danil Naumovich Kovalenko, and Aleksey Ignat'yevich Rastrenenko

Ukrainskiye bentonity; geologiya, mineralogiya, fiziko-khimiya i
primeneniye v narodnom khozyaystve (Ukrainian Bentonites; Geology,
Mineralogy, Physical Chemistry, and Industrial Applications)
Kiev, Izd-vo AN Ukrainskoy SSR, 1958. 98 p. 3,000 copies printed.
Errata slip inserted.

Sponsoring Agency: Akademiya nauk Ukrainskoy SSR, Kiev. Soviet po
izucheniyu i proizvoditel'nykh sil USSR.

Resp. Ed.: F.D. Ovcharenko, Corresponding Member, Ukrainian SSR
Academy of Sciences; Ed. of Publishing House: Z.S. Pokrovskaya;
Tech. Ed.: V.I. Yurchishin

PURPOSE: The book is intended for engineers and technicians employed
in industries using catalysts, adsorbents, fillers, and plasticizers

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Ukrainian Bentonites; Geology, Mineralogy (Cont.)

SOV/1940

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TN/ad
6-29-59

RASTRENEKO, A.I.; ANTONOVSKAYA, S.N.; NEYMARK, I.Ye.

Hydrophilic properties of ion-exchange derivatives of A-type
zeolites. Koll. zhur. 27 no.2:269-273 Mr-Apr '65. (MIRA 18:6)

1. Institut fizicheskoy khimii AN UkrSSR, Kiev.

OVCHARENKO, Fedor Danilovich; KIRICHENKO, Nikolay Grigor'yevich;
KOVALENKO, Daniil Naumovich; RASTRENNIKOV, Aleksey Ignat'yevich;
POKROVSKAYA, Z.S., red.isd-va; YURCHISHIN, V.I., tekhn.red.

[Ukrainian bentonites; geology, mineralogy, physical chemistry,
and industrial applications] Ukrainskie bentonity; geologiya,
mineralogiia, fiziko-khimiia i primeneniie v narodnom khoziaistvo.
Kiev, Izd-vo Akad. nauk USSR, 1958. 98 p. (MIRA 12:2)

1. Chlen-korrespondent AN USSR (for Ovcharenko).
(Ukraine--Bentonite)

RASTRENIKO, A.I.
USSR/Physical Chemistry - Surface Phenomena, Adsorption, Chromatography, Ion Interchange.

B-13

Abs Jour: Referat. Zhurnal Khimya, No 2, 1958, 4016.

Author : I.Ye. Neymark, A.I. Rastrenenko, M.A. Piontkovskaya.

Inst :

Title : Preparation of Titanium Silica Gels and Their Porous Structure.

Orig Pub: Kolloidn. zh., 1957, 19, No 3, 324-332.

Abstract: Methods of preparation of titanium silica gels (TSG) and titanium gels (TG) of various texture (total porosity from 0.3 to 2.2 cub.cm per g) and with TiO_2 content up to 22% were developed. The texture of TSG was studied by measuring the apparent and true density and by taking down the isotherms of methanol vapor sorption at 20°, which were used for the computation of the specific surface and the distribution of pores according to their radii. It is shown that the conditions of TSG and TG preparation influence the final texture

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U.S.R./Physical Chemistry - Surface Phenomena, Adsorption, Chromatography, Ion Interchange.

B-13

Abs Jour: Referat. Zhurnal Khimiya, No 2, 1958, 4016.

of dry gels in the same way as in the case of silica gels (SG), in consequence of which a conclusion about the analogy of the mechanisms of TG, TSG and SG texture formation was arrived at.

Card 1 2/2

-22-

USSR/Thermodynamics - Thermochemistry. Equilibria.

B-8

Physical-Chemical Analysis. Phase Transitions.

Abs Jour : Referat Zhur - Khimiya, No 6, 1957, 18523

Author : P.K. Migal', N.G. Glebko, A.I. Rastrenenko.

Inst : Chernovtsy University.

Title : Study of Aniline - n-Butyl Alcohol System by Cryoscopic Method.

Orig Pub : Nauch. zap. Chernivets'k. un-tu, 1955, 11, No 2, 3-12

Abstract : Cryoscopic measurements of solutions of aniline (I) and n-butyl alcohol (II) in benzene with the content of I increasing by 10 mol % from 0 to 100 mol % were carried out. The deviations of the experimental temperature depression of freezing from the computed in accordance with the solution composition as a sum of depressions by I and II were determined for total molalities of 0.6, 0.8, 1.0 and 1.2. It was shown that the maximum of deviations was near the composition 50% of I and 50% of II. It was surmised that there existed a compound of I and II of the

Card 1/1

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above composition.

USSR/Kinetics - Combustion. Explosions. Topochemistry. Catalysis. B-2

Abs Jour : Referat Zhur - Khimiya, No 6, 1957, 18626

Author : I.Ye. Neymark, L.Kh. Freydlikh, A.I. Rastrenenko, N.V. Borunova.

Inst : Academy of Sciences of USSR.

Title : Change in Macrostructure and Catalytic Activity of Aluminum Oxide under Influence of Treatment with Steam and at Compression.

Orig Pub : Izv. AN SSSR, Otd. khim. n., 1956, No 7, 784-789.

Abstract : The following three samples of Al_2O_3 -catalysts were studied: fresh Al_2O_3 (I), I treated 5³ hours with steam at 350° and 100 atm. (II), II compressed with 20,000 atm. (III). As compared with I, a decrease of the specific surface S from 355 to 125 sq.m/g, an increase of the prevailing pore radius r from 30 to 90 Å, and a decrease of the catalytic activity in dehydration reactions of formic acid and C_2H_5OH was detected in the sample II. The

Card 1/2

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USSR/Kinetics - Combustion. Explosions. Topochemistry. Catalysis. B-9

Abs Jour : Referat Zhur - Khimiya, No 6, 1957, 18626

The dissociation depth of C_2H_5OH at 310° was 93.3% in case of I, while in case of II this reaction did not take place even at 400 to 425° . In case of III, $S = 280$ sq.m/g, r was about 10 A; the apparent density was about 2.5 times greater than that of II; the volume of transition pores was about 5 times less. The specific catalytic activities of I and III in the dehydration reaction of $HCOOH$ at low temperatures differ insignificantly; at high temperatures, the catalytic activity of III drops considerably, which, in the authors' opinion, is explained by the diffusion slowing down in consequence of insufficient transition pores. The authors assume that treatment with steam can serve as a method of controlling the porosity character of oxide catalysts.

Card 2/2

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RASTRENE NIKO, I-YE A-I
USSR/Physical Chemistry - Kinetics, Combustion, Explosions, Topochemistry, Catalysis.

B-9

Abs Jour: Referat. Zhurnal Khimiya, No 3, 1958, 7244.

Author : A.I. Rastrenenko, I.Ye. Neymark.

Inst :

Title : Porous Structure of Titanosilica and Alumosilica Gels and Their Catalytic Activity.

Orig Pub: Zh. fiz. khimii, 1957, 31, No 4, 874-881.

Abstract: The following was studied; the porous structure of various titanosilica gels (I) containing 13 and 22% of TiO_2 and alumosilica gels (II) containing 6% of Al_2O_3 , as well as their catalytic activity at the dehydrating decomposition of $HCOOH$ in a circulating system at 200 to 400 . Specimens of I and II of the same composition by of various porosity were studied. The porosity was computed from the isotherms of methyl alcohol adsorption and desorption; the prevailing pore radius r varies from 60 to < 10 A,

Card : 1/3

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USSR/Physical Chemistry - Kinetics, Combustion, Explosions, Topo-
chemistry, Catalysis.

B-9

Abs Jour: Referat. Zhurnal Khimiya, No 3, 1958, 7244.

the kinetic reaction regime. Calcination results in the dis-
appearance of fine pores, in consequence of which the remaining
surface becomes more accessible.

Card : 3/3

-27-

RASTRENIENKO, A. I.

Variations of macrostructure and catalytic activity of aluminum oxide under pressure and steam treatment. I. R. Nelmak, L. Kh. Freidlin, A. I. Rastrenenko and N. V. Borunova (Izv. Akad. Nauk SSSR, Otd. Khim. Nauk, 1956, 784-789). Specimens of aluminum oxide were submitted to steam treatment at 350° (I) and pressure of 20,000 atm. (II). Dehydration tests were made afterwards with I by use of formic acid, ethyl alcohol and isopropyl alcohol. I caused a profound porosity alteration (almost complete disappearance of macropores and a decrease from 355 to 125 m.²/g. in the sp. surface area). In earlier experiments, this condition was achieved only by use of untreated Al₂O₃ at 1000°. It also caused a lowering of activity through variation of macrostructure. Steam treatment of Al₂O₃ could effect porosity control. A. I. R.

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RASTRENNENKO, N. I.

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4E2C

Preparation of titanosilica gels and their porous structure. N. I. Rastrenenko, A. I. Rastrenenko, and M. A. Piontorskaya (Inst. Phys. Chem. Acad. Sci. Ukr. S.S.R. Kiev). *Dokl. Akad. Nauk*, 19, 324-33 (1957); *cf. C.A.B.* 52, 18002i. Dry gels contg. 5 to 22% TiO_2 and 78 to 98% SiO_2 were prepd. by adding a Na_2SiO_3 soln. to a suspension of TiO_2 in H_2SO_4 (d. 1.18) or by adding an aq. suspension of TiO_2 to a sol made from Na_2SiO_3 and H_2SO_4 , or by mixing a SiO_2 sol with a $\text{Ti}(\text{OH})_3$ suspension. The porosity of the gels, detd. from d. and from adsorption of MeOH , was independent of the mixing procedure and of the TiO_2 content but greatly depended on the details of washing and drying of the freshly pptd. gel. Thus d., specific surface S , and the most frequent pore radius R were, resp.: 1.25, 680 sq. m./g. and $<10 \text{ \AA.}$ for a gel washed with distd. H_2O at pH 6, and 0.87, 680 sq. m./g. and 17 $\text{\AA.}$ for a gel washed with tap H_2O at pH 7.5. When the aq. phase was displaced by iso-BuOH before drying, d., S , and R were 0.80, 400, and 65, resp. When H_2O was evapd. at room temp., they were 1.39, 645, and <10 , as compared with 1.24, 680, and 15, when the evapn. was at 200° . Thus, coarse pores were obtained when the liquid filling the gel had a small surface tension and when the gel skeleton was stiff. Also the porosity of TiO_2 gels was greater when H_2O was displaced by BuOH before drying and when H_2O was evapd. at a higher temp. (120° instead of 20°). J. J. Hillman.

KASTRENENKO, A. I.

5

The change in the macrostructure and in the catalytic activity of aluminum oxide on treatment with water vapor and on being compressed. L. B. Nelmark, L. Kh. Freidlin, A. I. Kastrenenko, and N. V. Borunova. *Bull. Acad. Sci. U.S.S.R., Div. Chem. Sci.* 1956, 803-7 (English translation).—See C.A. 51, 4110f. B. M. R.

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RASTRENNIKO, A.I.; NEYMAEK, I.Ye.

The porous structure of titanium silica gels and aluminum silica gels and their catalytic activity. Zhur.fiz.khim. 31 no.4:874-881
Ap '57. (MIRA 10:7)

1. Akademiya nauk USSR, Institut fizicheskoy khimii im. L.V.Pisarshevskogo.
(Aluminum silicates) (Titanium silicates) (Silica gel)
(Catalysts)

RASTREPIN, A.B.; ZOLOTOTRUBOV, I.M.; BUGAY, Yu.P.

Mass-spectrometric study of the energy distribution of ions in
a plasma. Izv. AN SSSR. Ser. fiz. 27 no.8:1113-1117 Ag '63.
(MIRA 16:10)

1. Fiziko-tehnicheskii institut AN UkrSSR.

L 21708-66 EWT(1)/ETC(f)/EPE(n)-2/EWG(m) IJP(c) AT

ACC NR: AP6004885

SOURCE CODE: UR/0037/66/036/001/0111/0118

AUTHOR: Zolototrubov, I.M.; Rastrepin, A.B.; Skoblik, I.P.

ORG: none

TITLE: Investigation of the energy distribution in the hydrogen plasma from a coaxial plasma gun

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 1, 1966, 111-116

TOPIC TAGS: hydrogen plasma, plasma gun, mass spectrometry, ion energy, hydrogen ion

ABSTRACT: The energy distribution of hydrogen ions in hydrogen plasmas emitted by a coaxial plasma gun was investigated as a function of the polarity of the potential applied to the gun electrodes and the delay time between admitting the gas and firing the gun in an effort to elucidate the operating mechanism of the plasma gun. The plasma gun has been described elsewhere by I.M.Zolotrubov, V.A.Kiselev, and Yu.M.Novikov (ZhTF, 34,998, 1964). Approximately 0.8 cm^3 of hydrogen was admitted through an opening in the outer electrode of the gun by an electrodynamic valve that remained open for 80 μsec . The gun was powered by a 20 kV 12 μF capacitor, the resonant period of the circuit being 13 μsec . On the axis of the gun and 1 m from it was the entrance aperture of a mass spectrometer. Plasma ions entering the spectrometer were accelerated by a 15 kV electric field, deflected by a magnetic field, and detected by a scintillation counter. The flight time of each ion from the mouth of the gun to the de-

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UNC: 893.9

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ACC NR: AP6004885

ector was subtracted from the time at which it was recorded, thus determining the instant of origin. The current through the plasma gun and the potential at each end of it were recorded with an oscillograph. When the delay between opening the valve and firing the gun was short (85 μ sec) the energy distribution of the plasma ions was approximately the same, regardless of the polarity of the potential applied to the gun: the energy distribution was bimodal with peaks at 1-2 and 8 keV, ions with energies as high as 20 keV were recorded, and substantially all the ions originated near the instant of maximum current through the plasma gun. When the delay time was increased the high energy peak disappeared, the low energy peak shifted toward lower energies, and the ions originated at later times in the discharge cycle. These shifts were much more pronounced when the inner electrode of the plasma gun was negative than when it was positive. When the delay was 285 μ sec and the inner electrode was positive the peak of the energy distribution was at 0.8 keV and the ions originated at the instant the current through the gun first fell to zero (some 6 μ sec after application of the potential); with the same delay time and the inner electrode negative, the peak of the energy distribution was at 0.3 keV and the ions originated some 20-22 μ sec after potential was applied to the gun. The observed phenomena are discussed at some length, and it is concluded that the difference between the energy spectra of the ions observed with positive and negative potentials applied to the inner electrode of the gun apparently reflects differences between the physical processes taking place in the two cases. Orig. art. has: 6 figures.

SUB CODE: 20/

SUM DATE: 09Jan65/

ORIG REF: 006/

OTH REF: 007

Card 2/2 *ULR*

FOGEL', Ya.M.; SLABOSPITSKIY, R.P.; RASTREPIN, A.B.

Emission of charged particles from the surface of a metal during bombardment with positive ions. Zhur.tekh.fiz. 30 no.1:63-73 (MIRA 13:8) Ja '60.

1. Khar'kovskiy gosudarstvennyy universitet im. A.M. Gor'kogo. (Ions) (Secondary electron emission)

L 8226-66 EWT(1)/EWT(m)/EWG(m)/EWP(t)/EWP(b) IJP(c) JD/AT
 ACC NR: AT5024119 SOURCE CODE: UR/3137/64/000/081/0001/0010
 AUTHOR: ^{44,55} Zolototrubov, I. M.; ^{44,55} Rastrepin, A. B.; ^{44,55} Skoblik, I. P. ⁶⁶
 ORG: ^{44,55} Academy of Sciences UkrSSR, Physicotechnical Institute (Akademiya Nauk UkrSSR, Fiziko-tehnicheskii institut)
 TITLE: Investigation of energy partition in hydrogen plasma from a coaxial source
 SOURCE: AN UkrSSR. Fiziko-tehnicheskii institut. Doklady, no. 081/P-033, 1964. ²⁷
 Issledovaniye energiticheskogo raspredeleniya vodorodnoy plazmy koaksial'nogo istochnika, 1-10
 TOPIC TAGS: plasma gun, hydrogen plasma, gas discharge spectroscopy ^{21,44,55} ^{21,44,55}
 ABSTRACT: Energy partition in the hydrogen plasma produced in a coaxial gun is investigated in an apparatus that includes an ion energy spectrum analyzer. The plasma gun operates at 80 ka and the current period is $1.3 \cdot 10^{-5}$ sec. An active impedance reduces the third half-period to 10% of the initial amplitude. 0.8 cm^3 of hydrogen gas is injected into the highly evacuated chamber at various intervals before the application of the voltage pulse to the gun electrodes. The ions generated in the discharge are analyzed in the ion energy detector using the magnetic field to produce selective deflection of the ions and the ion current is detected by CsI (Tl) crystal optically coupled to a photomultiplier. This detector was also used to determine the

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L 8226-66

ACC NR: AT5024119

time of formation of the ions in the gun by determining the time between the start of the discharge and the peak of the ion current. The energy spectrum for H_1 ions for delay times of 85×10^{-6} to 285×10^{-6} sec is given. Additionally, it is shown that for short delays (85 per sec) the dominating spectrum occurs during the current maximum. For longer delays, the emergence of spectrum is delayed also. The observations are carried out for both polarities of the axial electrodes. Some difference in the spectrum is observed. Both polarities give a two-peak distribution for the shortest delay times. The major peaks occur at 10 kev. Some remarks on the accelerating mechanism are given but the data does not permit full classification of this process. Orig. art. has: 6 figures.

SUB CODE: 20/ SUBM DATE: 00/ ORIG REF: 009/ OTH REF: 006

Card 2/2

ILESHIN, Boris Ivanovich; RASTREPIN, Nikolay Maksimovich; CHERNYAK,
R.I., red.; ~~RASTREPIN~~, P.A., tekhn. red.

[Source of mighty torrent; an account of the people and work
of the Komintern Collective Farm] Istoki moguchego razliva; ras-
skaz o liudiakh i delakh ordena Lenina kolkhoza imeni Kominterma.
Tambov, Tambovskoe knizhnoe izd-vo, 1960. 111 p. (MIRA 16:2)
(Michurinsk District--Collective farms)

RASIREPIN, V.N.; KLINOV, I.Ya.

Studying the electrochemical corrosion of structural carbon
steel in the production of activated carbon black. Trudy
MIKHM 28:38-54 '64. (MIPA 19:1)

RASTREPIN, V.N.; KLINOV, I.Ya.

Corrosion of structural carbon steel in the production of active carbon black. Izv.vys.ucheb.zav.;khim.i khim.tekh. 5 no.3:509-513 '62. (MIRA 15:7)

1. Moskovskiy institut khimicheskogo mashinostroyeniya, kafedra korrozii.

(Steel, Structural—Corrosion)
(Carbon black)